

SUBJECT AND AUTHOR INDEX

MAY, 1952-OCTOBER, 1953

A

- A-C network calculator, Ja '53, 7
- , aid to graduate students, Ja '53, 8, 13
- , applied to hydraulic problems, Ja '53, 8
- Acoustic phonetics—an engineering approach to speech, Ja '53, 5
- Agriculture, bulk sampling of peanuts, My '52, 5
- Allen, R. L., the automobile engine, My '52, 9
- Almon, Tom F., some recent developments in reading, S '52, 5
- Analogous computers, Ap '53, 18
- Applications of computing machines to the problems of general staffs, Ap '53, 5
- Architecture, expanding activities in the school of, S '52, 9
- Arealometer, limitations of, S '52, 12
- Automobile engine, My '52, 9

B

- Bacteria removal from air, Jl '53, 9
- Ballistocardiograph, and cardiac output, My '52, 4
- Bandwidth and television picture quality, S '52, 12
- Bankston, P. T., a rapid liquid-phase adsorption method for the determination of the surface area of clays, Jl '53, 11
- Bellinger, Frederick, Ap '53, 24
- , Georgia clays, Oct '53, 3
- Belser, Richard B., thin metal films—new methods for their production, My '52, 7
- Benzidine dihydrochloride to determine sulfate ion, S '52, 11
- Blocker, H. G., —, fitting bimodal particle size distribution curves, S '52, 13
- , surface areas of metals and metal compounds: a rapid method of determination, Oct '53, 24
- Bredendieck, Hin., expanding activities in the school of architecture, S '52, 9
- Brooke, Russell J., applications of computing machines to the problems of general staffs, Ap '53, 5
- Brown, John L., electron diffraction, S '52, 7
- Burrows, W. H., —, computation engineering at industrial levels, Ja '53, 9
- , construction of circular nomographs with hyperbolic coordinates, S '52, 12
- , construction of nomographs with hyperbolic coordinates—general hyperbolic coordinates, S '52, 12
- , construction of three-dimensional nomographs, S '52, 13

C

- Cameras, diffraction, S '52, 18
- Carbon dioxide, solidified, Jl '53, 12
- Cardiac output measurement, My '52, 3
- Cellulose acetate, use in stress analysis, Ja '53, 15
- "Charactertron," Ap '53, 20
- Chip shape of lathe turnings, Jl '53, 7, 22
- Chlorine dioxide as a bactericide for water treatment, Jl '53, 11
- Clays, Oct '53, 3
- Cleveland Technical Society Council, Jl '53, 2
- Collins helium cryostat, Jl '53, 4
- Computation engineering at industrial levels, Ja '53, 9
- Computing machines, Ap '53, 5, 18

Construction of nomographs.

- , circular nomographs with hyperbolic coordinates, S '52, 12
- , general hyperbolic coordinates, S '52, 12
- , three-dimensional, S '52, 13
- Cornwall, R. R., limitations of the arealometer method for the measurement of fiber diameters, S '52, 12
- Craig, S. L., surface areas of metals and metal compounds: a rapid method of determination, Oct '53, 24
- Cristobalite, Oct '53, 12
- Crosland, Dorothy M., The Price Gilbert Library, Oct '53, 5
- Cryogenic laboratories, Jl '53, 14
- Crystal structure, by electron diffraction, S '52, 8
- Cudd, Dr. Herschel H., Ja '53, 24

D

- DallaValle, J. M., —, fitting bimodal particle size distribution curves, S '52, 13
- , limitations of the arealometer method for the measurement of fiber diameters, S '52, 12
- Dasher, Benjamin J., acoustic phonetics—an engineering approach to speech, Ja '53, 5
- Daugherty, P. M., —, industrial raw materials of plant origin, S '52, 11
- , industrial raw materials of plant origin. II. recent developments in vegetable waxes, gums, and resins, Oct '53, 23
- Determination of the fluoride ion with ferric thiocyanate, S '52, 11
- Determining inefficiencies in multiple-machine assignments, Ap '53, 7
- Differential analyzer, Ap '53, 18
- Diffraction patterns, S '52, 19, 20
- Diffraction, x-ray, Oct '53, 13
- Digital computers, Ap '53, 18, 19
- Dixon, Frederic, measurement of cardiac output, an illustration of medical instrumentation, My '52, 3
- Domain of low temperatures, Jl '53, 3
- Double shelf life?—it's "in the bag," S '52, 14
- Dye-pigment tracers to measure blood flow rate, My '52, 13
- Dynamometer for lathe cutting tools, Jl '53, 19

E

- Eberhardt, W. H., determination of the fluoride ion with ferric thiocyanate, S '52, 11
- Education, —, expanding activities in the school of architecture, S '52, 9
- , industry's demands, S '52, 2
- Electron diffraction, S '52, 7
- , application, S '52, 7, 21
- Engines for automobile, My '52, 9
- Evaporation techniques for thin metal films, My '52, 7
- Experimental stress analysis, Ja '53, 3

F

- Fats, production by microorganisms, S '52, 11
- Fibers, arealometer method for the measurement of diameters of, S '52, 12
- Fick principle in measuring cardiac output, My '52, 13
- Films, thin metal, new methods for production, My '52, 7

GEORGIA INSTITUTE OF TECHNOLOGY

Fitting bimodal particle size distribution curves, S '52, 13
Fluoride ion, determination of with ferric thiocyanate, S '52, 11

G

Georgia clays, Oct '53, 3
Godfrey, T. B. A., expanding activities in the school of architecture, S '52, 9
Gordon, M. T., thermal repulsion, JI '53, 9
Graphs, as computing engineering aids, Ja '53, 10

H

Heart, measurement of output, My '52, 3
Heat transfer,
—, coefficient, Oct '53, 7
—, to slurries flowing in pipes, Oct '53, 7
Hellum,
—, gas thermometer, JI '53, 4
—, liquefied, JI '53, 12
—, superfluid, JI '53, 13
Hengar mikrokjeldahl procedure, Oct '53, 24
Hildebrand, J. C., determination of the fluoride ion with ferric thiocyanate, S '52, 11
High school students, careers, JI '53, 2
High-speed K-band switch, JI '53, 11
Honnell, M. A.,
—, evaluating video bandwidth and picture quality, S '52, 12
—, telemetering by television means, Ap '53, 3
—, television image reproduction by use of velocity-modulation principles, S '52, 13
Humphrey, R. E., telemetering by television means, Ap '53, 3
Hydrogen, liquefied, JI '53, 12
Hyperbolic coordinates,
—, construction of circular nomographs with, S '52, 12
—, general, S '52, 12

I

Incentive allowance, multiple-machine assignments, Ap '53, 8
Industrial raw materials of plant origin, S '52, 11
Industrial raw materials of plant origin. II. recent developments in vegetable waxes, gums, and resins, Oct '53, 23
Information, properties, Ap '53, 19
Ingols, R. S.,
—, chlorine dioxide as a bactericide for water treatment, JI '53, 11
—, determination of the fluoride ion with ferric thiocyanate, S '52, 11
—, limnology as a science, JI '53, 5
—, sulfate ion determination with benzidine dihydrochloride, S '52, 11
—, volumetric determination of sulfate ion, S '52, 12
Input admittance characteristics of a tuned coupled circuit, S '52, 13
Interference computer, Ap '53, 8

J

Jamgochian, J., telemetering by television means, Ap '53, 3
Jones, Dale, determining inefficiencies in multiple-machine assignments, Ap '53, 7

K

Kaolin industry in Georgia, Oct '53, 3
Kaolinite, nb/3 shifting, Oct '53, 12

L

Lanthanum metal, JI '53, 13
Lathe cutting tools, JI '53, 7
LaVier, H. W. S., permeability of parachute fabrics, S '52, 3
Lee, R. A., measurements of cardiac output, an illustration of medical instrumentation, My '52, 3

Library facilities at Georgia Tech, Oct '53, 6
Library research, Oct '53, 2
Limitations of the arealometer method for the measurement of fibre diameters, S '52, 12
Limnology as a science, JI '53, 5
Lont, M. W., a high-speed K-band switch, JI '53, 11
Low temperatures, JI '53, 3

M

Machine interference, Ap '53, 7
Machinability, JI '53, 7
Manpower,
—, technical, Ap '53, 2
—, for research, S '52, 2
Martin, R. A., input admittance characteristics of a tuned coupled circuit, S '52, 13
McConnell, J. W., sulfate ion determination with benzidine dihydrochloride, S '52, 11
Measurement of cardiac output—an illustration of medical instrumentation, My '52, 3
Medical instrumentation, My '52, 3
Menhinick, H. K., expanding activities in the school of architecture, S '52, 9
Metal-cutting tools, JI '53, 7
Metal films, new methods of producing, My '52, 7
Methyl methacrylate, use in stress analysis, Ja '53, 15
Mikrokjeldahl procedure in water and sewage analysis, Oct '53, 24
Miller, H. E., limnology as a science, JI '53, 5
Miller, R. N., double shelf life?—it's "in the bag," S '52, 14
Moler, J. C., bulk sampling of farmers' stock peanuts, My '52, 5
Morris, J. L., lathe cutting tools, JI '53, 7
Multiple machine assignments, calculation of economic work load, Ap '53, 8
Munser, J. R., volumetric determination of sulfate ion, S '52, 12

N

Nipplier, R. W., volumetric determination of sulfate ion, S '52, 12
Nomographs,
—, computing engineering aids, Ja '53, 10, 11
—, construction of circular, with hyperbolic coordinates, S '52, 12
—, construction of general, with hyperbolic coordinates, S '52, 12
—, construction of three-dimensional, S '52, 13

O

Oil,
—, as industrial raw materials, S '52, 11
—, economical recovery through research, My '52, 2
—, solvent-extraction of, S '52, 11
Opportunity to help, JI '53, 2
Orr, C., Jr.,
—, a rapid liquid-phase adsorption method for the determination of the surface area of clays, JI '53, 11
—, fitting bimodal particle size distribution curves, S '52, 13
—, Georgia clays, Oct '53, 3
—, heat transfer to slurries flowing in pipes, Oct '53, 7
—, limitations of the arealometer method for the measurement of fiber diameters, S '52, 12
—, surface areas of metals and metal compounds: a rapid method of determination, Oct '53, 24
Our stake in research, Ap '53, 2
Oximeter, measure of oxygen in blood, My '52, 18

P

Parachute fabric permeability, S '53, 3
Particle size, fitting, bimodal particle size distribution curves, S '52, 13

EXPERIMENT STATION RESEARCH ENGINEER

Peanuts.

- automatic sampling and precleaning equipment, My '52, 6
- , bulk sampling of farmers' stock, My '52, 5
- , effects of regrades on price, My '52, 6
- , variation of repeated damage analyses, My '52, 19

Permeability of parachute fabrics, S '52, 3

Permeometer limitations, S '52, 12

Permeometer, testing of parachute fabrics, S '52, 3

Peters, Herbert P.

—, power-system arithmetic, Oct '53, 24

—, review of calculator operations, Ja '53, 7

Phonemes, speech sound variants, Ja '53, 5

Phones, basic speech sounds, Ja '53, 5

Plankton, JI '53, 6, 15

Pneumotachogram analysis of blood flow rate, My '52, 15

Polariscope, Ja '53, 16, 17

Potato chips, preservation of, S '52, 14

Poulos, N. E., Georgia clays, Oct '53, 3

Power-system arithmetic, Oct '53, 24

Price Gilbert Library, Oct '53, 5

Prince, M. D.

—, evaluating video bandwidth and picture quality, S '52, 12

—, television image reproduction by use of velocity-modulation principles, S '52, 13

Problems of general staffs, applications of computing machines, Ap '53, 5

Properties of metals below -300°F , Oct '53, 24

Publication schedule, for **The Research Engineer**, Ja '53, 24

Pulse-position-modulation signal, telemetering system, Ap '53, 16

R

Radio stars, S '52, 2

Radioactive tracers, to measure blood flow rate, My '52, 13

Rapid liquid-phase adsorption method for the determination of the surface area of clays, JI '53, 11

Rapid reading, S '52, 5

Raw materials, industrial, of plant origin, S '52, 11

Reading, some recent developments in, S '52, 5

Recent station publications, S '52, 11; JI '53, 11; Oct '53, 23

Reid, G. W., microkjeldahl procedure in water and sewage analysis, Oct '53, 24

Research,

—, applied, Ap '53, 23

—, attracting industry, My '52, 2

—, basic, Ap '53, 23; JI '53, 11

—, benefit to mankind, Ap '53, 2

—, clay industry, Oct '53, 3

—, low temperature, JI '53, 13

—, manpower, JI '53, 10

—, pays off, My '52, 2

—, revolution, Ja '53, 2

Review of calculator operations, Ja '53, 7

Robertson, W. E., double shelf life?—it's "in the bag," S '52, 14

S

Sampling of farmers' stock peanuts, My '52, 5

Shaw, E. H., determination of the fluoride ion with ferric thiocyanate, S '52, 11

Sineath, H. H.,

—, industrial raw materials of plant origin, S '52, 11

—, industrial raw materials of plant origin. II. recent developments in vegetable waxes, gums, and resins, Oct '53, 23

Slurries,

—, fluidity, Oct '53, 19

—, thermal conductivity, Oct '53, 7

Some recent developments in reading, S '52, 5

Sound spectrograph, Ja '53, 22

Speech analyzer, Ja '53, 5, 21

Speech, an engineering approach by acoustic

phonetics, Ja '53, 5

Sputtering techniques for thin metal films, My '52, 7, 21

State Engineering Experiment Station, recent publications, S '52, 11; JI '53, 11; Oct '53, 23

Stearic acid, adsorption on metals, metal cata-

lysts and metal oxides, Oct '53, 24

Strain analysis, Ja '53, 15

Stress analysis, Ja '53, 3

Sulfate ion determination,

—, benzidine dihydrochloride, S '52, 11

—, volumetric, S '52, 12

Summary of the conference on administration of research, JI '53, 11

Superconductivity, JI '53, 13

Supersonic wind tunnel, S '52, 4

Surface areas of metals and metal compounds:

a rapid method of determination, Oct '53, 24

T

Tachistoscope, S '52, 6

Teasdale, R. D., input admittance characteristics of a tuned coupled circuit, S '52, 13

Technically trained manpower, JI '53, 2

Technological schools, key to nations development, JI '53, 2

Telemetering by television means, Ap '53, 3

—, applications, Ap '53, 17

Television,

—, evaluating video bandwidth and picture quality, S '52, 12

—, image reproduction by use of velocity-modulation principles, S '52, 13

Thermal precipitators, JI '53, 9

Thermal conductivity of slurries, Oct '53, 8

Thermal repulsion, JI '53, 9

Thermoclines, JI '53, 16

Thin metal films—new methods for their production, My '52, 7

Turbidity, lakes and streams, JI '53, 16

V

Van Leer, Blake R.,

—, demand for superior teachers, Ja '53, 2; Oct '53, 2

—, environment for industry in Georgia, My '52, 2

—, technical manpower needed, S '52, 2

—, technical manpower supremacy, Ap '53, 2

—, technically trained manpower—a hope for the future, JI '53, 2

Velocity, modulation of television images, S '52, 13

Versenate method for determination of sulfate ion, S '52, 12

Vidosic, J. P., experimental stress analysis, Ja '53, 3

Viscosity of slurries, Oct '53, 8

W

Walker, E. A., summary of the conference on

administration of research, JI '53, 11

Walton, J. D., Georgia clays, Oct '53, 3

Wastler, T. A.,

—, industrial raw materials of plant origin, S '52, 11

—, industrial raw materials of plant origin. II. recent developments in vegetable waxes, gums, and resins, Oct '53, 23

Whitley, W. C., Georgia clays, Oct '53, 3

Woodward, L. A., Georgia clays, Oct '53, 3

Y

Young, R. A., Georgia clays, Oct '53, 3

Z

Ziegler, W. T.,

—, the domain of low temperatures, JI '53, 3

—, properties of metals below -300°F , Oct '53, 24